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REMARKS

By this Amendment, claims 1 and 4 have been amended. Claims 5-8 are newly added. Upon entry of this Amendment, claim 1 and 3-8 will be pending. Support for the instant amendments is provided throughout the as-filed specification. Thus, no new matter has been added. In view of the foregoing amendments and following comments, allowance of all the claims pending in the application is respectfully requested.

CLAIM OBJECTIONS

The Final Action has objected to claim 1 for allegedly containing informalities. In particular, the Final Action objected to the word “configured” on line 9 of claim 1, and suggested that “configured” should be replaced by --is configured--. In response, claim 1 has been amended according to the Final Action’s suggestion.

REJECTIONS UNDER 35 U.S.C. §103

Claims 1 and 4 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,870,698 to Riedel *et al.* (“Riedel”) in view of U.S. Patent Application Publication No. 2003/0176938 to Tuszynski (“Tuszynski”). Claims 1, 3 and 4 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,461,570 to Wang *et al.* (“Wang”) in view of Tuszynski. Applicants respectfully traverse these rejections for at least the following reasons.

Applicants disagree with the propriety of the rejections. However, solely in an effort to expedite prosecution, claims 1 and 4 have been amended to clarify points of patentability over the cited art. With this said, claim 1 is directed to a stand-alone display device of an injection molding machine that operates in accordance with an operating condition, the display device comprising an input unit configured to receive an input including a state of an operating quality for a change in the operating condition; a storage process unit configured to store data including history data including one or more of product data, mold numbers, resin material data or product

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molding conditions, the history data indicative of the change in the operating condition and the state of the operating quality corresponding to the change, wherein the storage process unit is configured to record data including data indicative of product identification data indicating a product produced by the injection molding machine in accordance with the change in the operating condition and the history data corresponding to the product identification data; and a display unit configured to simultaneously display a first display area and a second display area in the display unit, wherein the first display area is configured to display data that includes the history data and product identification data and the state of the operating quality resulting from the change in the inputted operating condition stored by the storage process unit and the second display area is configured to display data that includes monitoring data representing the operating condition for the injection molding machine. Applicants respectfully submit that the cited portions of Riedel, Wang, Tuszyński, and any proper combination thereof, fail to disclose, teach or render obvious every feature of claim 1.

Moreover, claim 4 has been amended and is directed to a stand-alone history collecting system comprising a communication unit configured to communicate with a display device of an injection molding machine operated in accordance with an operating condition through a communication medium, the display device configured to simultaneously display a first display area and a second display area in the display device, wherein the first display area is configured to display data that includes the history data and product identification data and the state of the operating quality resulting from the change in the inputted operating condition stored by the storage process unit and the second display area is configured to display data that includes monitoring data representing the operating condition for the injection molding machine; a unit configured to receive data including history data including one or more of product data, mold numbers, resin material data or product molding conditions, the history data indicative of a change in the operating condition and a state of an operating quality corresponding to the change in the operating condition from the display device using the communication unit; and a storage unit configured to store the history data, wherein the storage unit records data indicative of a product identification data indicating a product produced by the injection molding machine in

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accordance with the change in the operating condition and the history data corresponding to the product identification data, wherein the display unit is configured to display data that includes the history data and the state of the operating quality resulting from the change in the operating condition. Applicants respectfully submit that the cited portions of Riedel, Wang, Tuszynski, and any proper combination thereof, fail to disclose, teach or render obvious every feature of claim 4.

First, the Final Action concedes that Riedel fails to disclose the feature of "the storage process unit records data indicative of product identification data indicating a product produced by the injection molding machine, in accordance with the change in the operating condition and the history data corresponding to the product identification data." [Office Action, page 3].

Moreover, the cited portions of Riedel do not disclose, teach or render obvious at least the features of "a display unit configured to simultaneously display a first display area and a second display area in the display unit, wherein the first display area is configured to display data that includes the history data and product identification data and the state of the operating quality resulting from the change in the inputted operating condition stored by the storage process unit and the second display area is configured to display data that includes monitoring data representing the operating condition for the injection molding machine," as recited in claim 1 and 4.

Riedel discloses a monitoring apparatus that is externally attachable to machines such as a injection molding machine. In particular, the cited portions of Riedel disclose the monitoring apparatus is arranged to monitor a family of plastic injection molding machines 202 and simultaneously display a summary and/or status information about each machine. *See*, column 7, lines 4-13 and column 8, lines 23-27 of Riedel.

Wang discloses a quality control system for a contact lens manufacturing facility that automatically acquires process control data from a plurality of manufacturing process controllers that control contact lens production and that can automatically process the data for real-time display and off-line analysis purposes. *See*, column 1, line 64 – column 2, lines 2 of Wang. In particular, the cited portions of Wang specifically disclose a plurality of operator stations 400

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including display server 404 and user interface manager 502 which are connected by a network 99 to an offline analysis node 500, a data acquisition node 100. *See*, Figure 1 of Wang.

However, the cited portions of Riedel and Wang do not disclose or teach that the display can simultaneously display a first display area and a second display area. Even assuming *arguendo* that Riedel and Wang do suggest this feature (which Applicants do not concede and expressly refute), the cited portions of Riedel and Wang still fail to disclose that the first display area is configured to display data that includes the history data and product identification data and the state of the operating quality resulting from the change in the inputted operating condition stored by the storage process unit. Moreover, the cited portions of Riedel and Wang do not disclose or teach that second display area is configured to display data that includes monitoring data representing the operating condition for the injection molding machine.

The cited portions of Tuszyński fail to remedy the above-described deficiencies of either Riedel or Wang. The cited portions of Tuszyński merely teach a statistical modeling approach to determine the relationship of various input parameters with a resulting output product. *See*, paragraphs [0013] and [0014] of Tuszyński.

Therefore, the cited portions of Riedel, Wang, Tuszyński, and any proper combination thereof, fails to disclose, teach or render obvious every feature in claims 1 and 4. Claim 3 is patentable over the cited portions of Riedel, Wang, Tuszyński, and any proper combination thereof, at least by virtue of its dependency from claim 1, and for the additional features it recites.

Thus, Applicants respectfully request that the rejections under 35 U.S.C. §103(a) be withdrawn and the claims be allowed.

Claim 5 is newly added. Applicants respectfully submit that the cited portions of Riedel, Wang, Tuszyński, and any proper combination thereof, fails to disclose, teach or render obvious every feature a stand-alone display device of an injection molding machine that operates in accordance with an operating condition, the display device comprising an input unit, coupled to the display device, configured to receive an input from a user and from the injection molding machine; a screen controller including a storage process unit, the screen controller configured to

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receive a display request from the input unit and configured to create a first display image on a first display area of the display device based on data stored in a first storage module and create a second display image on a second display area of the display device based on data stored in a second storage module; the storage process unit configured to receive and store data including one or more of changed molding conditions of the injection molding machine, molding qualities corresponding to the changed molding conditions, and product identification data indicative of a product molded by the injection molding machine in accordance with the changed molding conditions and history data including one or more of product data, mold numbers, resin material data, to the second storage module; the display device configured to simultaneously display the first and the second display image in the first and the second display areas, wherein the first display area is configured to allow the user to control and operate the injection molding machine by the input unit, as recited in claim 5.

Claim 8 is newly added. Applicants respectfully submit that the cited portions of Riedel, Wang, Tuszynski, and any proper combination thereof, fails to disclose, teach or render obvious every feature a history collecting system comprising a display device of an injection molding machine, the display device configured to simultaneously display a first and a second display image in a first and a second display area, wherein the first display area is configured to allow the user to control and operate the injection molding machine and the second display area is configured to display data stored in a storage module, where in the storage module is configured to store data including one or more of changed molding conditions of the injection molding machine, molding qualities corresponding to the changed molding conditions, and product identification data indicative of a product molded by the injection molding machine in accordance with the changed molding conditions and history data including one or more of product data, mold numbers, resin material data, the display device further including a communication module configured to communicate through a communications medium; and a remote communication terminal configured to communicate with the display device through the communications medium, the remote communication terminal including a collection unit, a collection storage unit, and a display unit; the collection unit configured to initiate

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communication with the display device and transfer the data stored in the storage module and store the transferred data into the collection storage unit, the display unit configured to display the data stored in the collection storage unit, as recited in claim 8.

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CONCLUSION

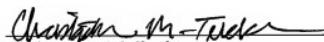
Having addressed each of the foregoing rejections, it is respectfully submitted that a full and complete response has been made to the outstanding Final Action and, as such, the application is in condition for allowance. Notice to that effect is respectfully requested.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Date: July 7, 2008

Respectfully submitted,

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